

**In the United States Patent and Trademark Office**

Serial Number: 10/688,021 (Provisional Serial Number: 60/419,699)  
Appn. Filed: 2003 October 17  
Applicant(s): Ross C Willoughby and Edward W. Sheehan  
Appn Title: Laminated Tube for the Transport of Charged Particles Contained in a Gaseous Medium  
Examiner/GAU: \_\_\_\_\_ / \_\_\_\_\_

Mailed: JAN 6, 2004  
At: Pittsburgh, PA

**Information Disclosure Statement**

Commissioner for Patents  
Alexandria, VA 22313-1450

Sir:

Attached is a completed Form PTO/SB/08(A&B) and copies of the pertinent parts of the references cited thereon. Following are comments on any non-English-Language references pursuant to Rule 98:

**Forssmann** shows an atmospheric focusing device with an accelerating and a focusing device, with the focusing device made up of a series of lens with decreasing apertures at higher potentials than the latter part of the accelerating device, for controlling the direction of the ions.

Forssmann does not show a laminated tube for introducing gas-phase ions formed at **atmospheric pressure into lower pressure regions** wherein the metal laminates of the laminated tube have **attracting [or decreasing] electrical potentials** than the previous upstream laminate, are used to focus and transfer ions in a downstream direction into the lower pressure region, forming an atmospheric-lower pressure interface, as it is recited in independent claims 1, 13, 17, and 18, and hence their dependent claims 2 to 12, 14 to 16, and 19 to 21.

To the contrary, Forssmann shows an ion focusing device at **atmospheric pressure with increasing electrical potentials** causing the deceleration and deflection of the ions in the direction of a diaphragm opening leading into a lower pressure region, the atmospheric-lower pressure interface.

Very Respectfully,

Applicant(s): Edward W. Sheehan

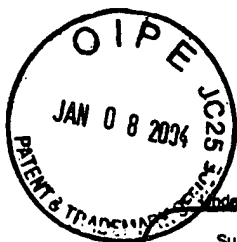
Enc.: PTO/SB/08(A&B) & References

c/o: Edward W. Sheehan and Ross C. Willoughby, Applicants Pro Se  
Chem-Space Associates, Inc., 655 William Pitt Way, Pittsburgh, PA 15238  
Telephone: 412-826-3013

**Certificate of Mailing**

I certify that this correspondence will be deposited with the United States Postal Services as Priority Mail with proper postage affixed in an envelope address to: "Mail Stop: Box Patent Application, Commissioner for Patents, PO Box 1450, Alexandria, VA 22313-1450" on the date below.

Date: 2004 JAN 6, Edward W. Sheehan, Applicant



PTO/SB/08a (08-03)

Approved for use through 07/31/2008. OMB 0651-0031

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Sheet 1 of 2

**C mplete If Known**

Application Number	10/688,021
Filing Date	2003 October 17
First Named Inventor	Willoughby, R.C.
Art Unit	
Examiner Name	
Attorney Docket Number	

**U. S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (If known)			
		US- 4,542,293	9/17/1985	Fenn et al.	
		US- 4,977,320	12/11/1990	Chowdhury et al.	
		US- 5,736,740	4/7/1998	Franzen	
		US- 5,747,799	5/5/1998	Franzen	
		US- 6,107,628	8/22/2000	Smith et al.	
		US- 6,359,275 B1	3/19/2002	Bertsch et al.	
		US- 6,486,469 B1	11/26/2002	Fisher et al.	
		US- 2002/0,185,595	12/12/2002	Smith et al.	
		US- 2003/0,034,452A1	2/20/2003	Fisher et al.	
		US- 6,583,407 B1	6/24/2003	Fisher et al.	
		US- 6,583,408 B2	6/24/2003	Smith et al.	
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**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>3</sup>
		Country Code <sup>4</sup> Number <sup>4</sup> Kind Code <sup>5</sup> (If known)				
		WO 03/010,794 A2	2/26/2003	Forssmann et al.		

Examiner  
SignatureDate  
Considered

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.87 and 1.88. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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10/688,021

2003 October 17

Willoughby, R.C.

**Examiner Name**

Attorney Docket Number

[illegible]

Date Considered

considered. Include copy of this form with next communication for appropriate action.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

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